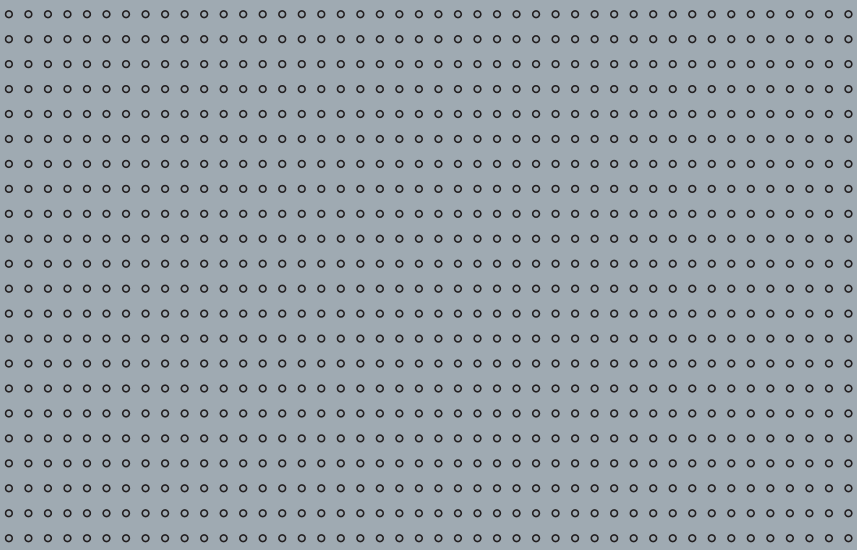
SIMRAD

Master the Elements

# Manual

## Simrad GS-15
## GPS Antenna

English



# Preface

## FCC Statement

This equipment has been tested and complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a normal installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. This device must accept any interference received, including interference that may cause undesired operation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an output on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.
- A shielded cable must be used when connecting a peripheral to the serial ports.

***Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.***

## Industry Canada

Operation is subject to the following two conditions:

(1) this device may not cause interference, and

(2) this device must accept any interference, including interference that may cause undesired operation of the device.

## CE Compliance

Hereby, Navico Inc. declares that this GS15 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Navico Inc. vakuuttaa täten että GS15 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Hierbij verklaart Navico Inc. dat het toestel GS15 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Par la présente, Navico Inc. déclare que ce GS15 est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.

Härmed intygar Navico Inc. att denna GS15 står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Undertegnede Navico Inc. erklærer herved, at følgende udstyr GS15 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/ EF.

Hiermit erklärt Navico Inc. dass sich dieses GS15 in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet. (BMWi)

Με την παρουσα Navico Inc. δηλωνει οτι GS15 συμμορφωνεται προς τις ουσιωδεις απαιτησεις και τις λοιπες σχετικες διαταξεις της οδηγιας 1999/5/ΕΚ.

Con la presente Navico Inc. New Zealand dichiara che questo GS15 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Por medio de la presente Navico Inc. declara que el GS15 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Navico Inc. declara que este GS15 está conforme com os requisitos essenciais e outras provisões da Directiva 1999/5/CE.

*The equipment named in this declaration, is intended for use in international waters as well as coastal sea areas administered by countries of the E.U. and E.E.A.*

## Disclaimer

As Navico is continuously improving this product, we retain the right to make changes to the product at any time which may not be reflected in this version of the manual. Please contact your nearest distributor if you require any further assistance.

It is the owner's sole responsibility to install and use the instrument and transducers in a manner that will not cause accidents, personal injury or property damage. The user of this product is solely responsible for observing safe boating practices.

NAVICO HOLDING AS. AND ITS SUBSIDIARIES, BRANCHES AND AFFILIATES DISCLAIM ALL LIABILITY FOR ANY USE OF THIS PRODUCT IN A WAY THAT MAY CAUSE ACCIDENTS, DAMAGE OR THAT MAY VIOLATE THE LAW.

Governing Language: This statement, any instruction manuals, user guides and other information relating to the product (Documentation) may be translated to, or has been translated from, another language (Translation). In the event of any conflict between any Translation of the Documentation, the English language version of the Documentation will be the official version of the Documentation.

This manual represents the product as at the time of printing. Navico Holding AS. and its subsidiaries, branches and affiliates reserve the right to make changes to specifications without notice.

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## Warranty

The warranty card is supplied as a separate document.

It is shipped with the product registration card.

In case of any queries, refer to the brand web site of your display

www.lowrance.com

www.northstarnav.com

www.simrad-yachting.com

www.eaglenav.com

## Feedback from you

Your feedback is important and helps Navico ensure that this manual is a valuable resource for all marine technicians. E-mail your comments or suggestions about this manual to the following address: tech.writing@navico.com

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# 1 Introduction

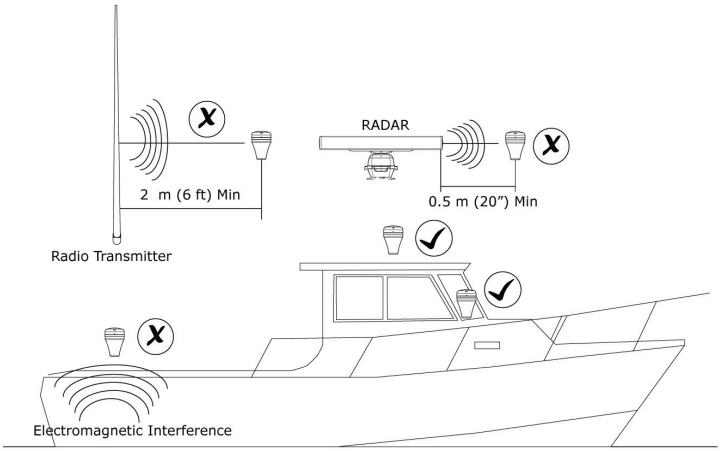
The following parts are included in the GS15 package

| Part no. | | Desription |
|---|---|---|
| 003-7983-00 | | Simrad GS15 antenna |
| 074-1002-000 | | Rubber gasket for surface mounting |
| 072-2389-000 | | Pole mount adapter |
| 24006413 | | Micro-C to SimNet cable<br>4 m (13 ft) |
| 083-0010-15 | | Screw x 2: Self tapper<br>#6 x 1" Pan head |
| 082-0071-11 | | Screw x 2: machine<br>#6 x 1" pan head |

# 2 Installation

## 2.1 Mounting location

Mount the antenna with a good view of the sky and horizon. The view should not be blocked by large parts of the superstructure. The unit could be mounted under glass, perspex, fiberglass or fabric, but not under metal or wood.

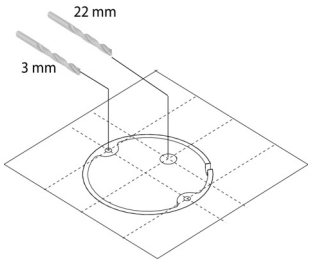



*If a location might not be suitable, follow the installation instructions below but mount the antenna and antenna cable temporarily, without drilling any fixing holes. If the system does not work properly, change the antenna location until it works properly. Then install the antenna and cable permanently.*

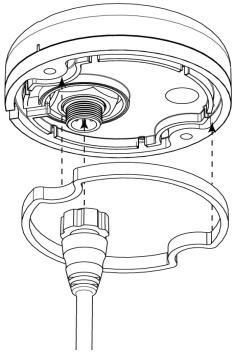
## 2.2 Surface mount

The GPS module can be installed on any flat surface that is at least 90mm (3-1/2”) wide.

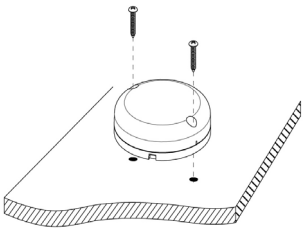
Once you have determined the mounting location:




**1.** Position the drilling template and drill holes according to drilling template



**2.** Insert the gasket in to the groove on the antenna.



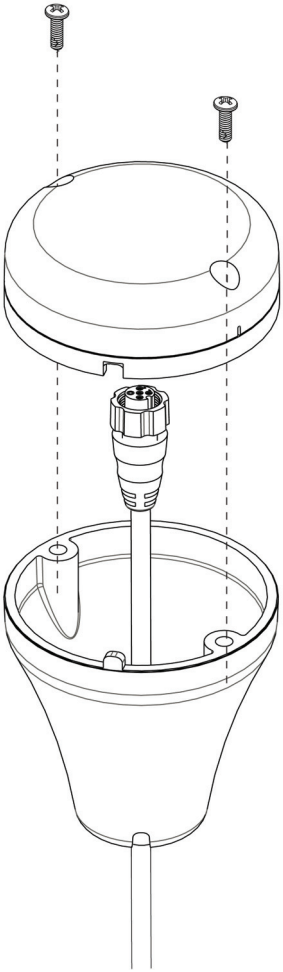
**3.** Join the extension cable

**4.** Secure using the two #6 x 1" pan head screws

**5.** Route the extension cable to the display unit

## 2.3 Pole mount

You can route the cable through the notch in the GS15 housing and down the side of the pole or you can pass it through the pole mount adapter and run the cable inside the pole.



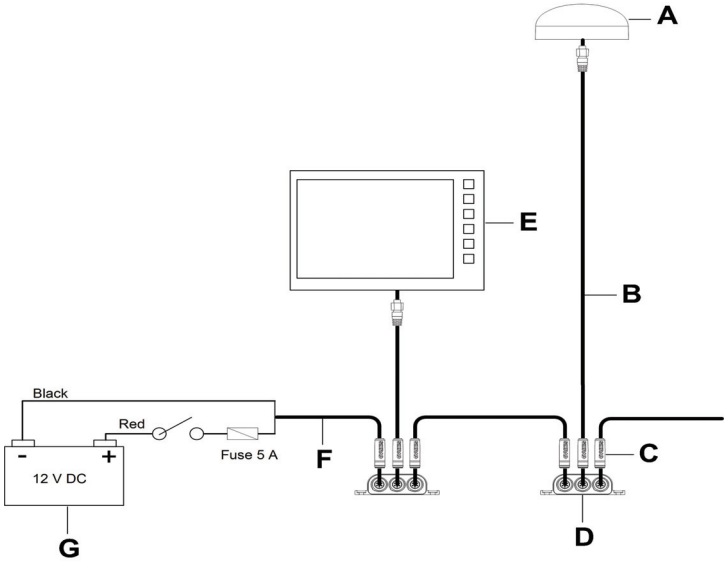
1. Attach the pole mount adapter to the antenna using the supplied pan head screws.

2. Route the extension cable through the mounting pole

3. Connect the antenna cable to the extension cable.

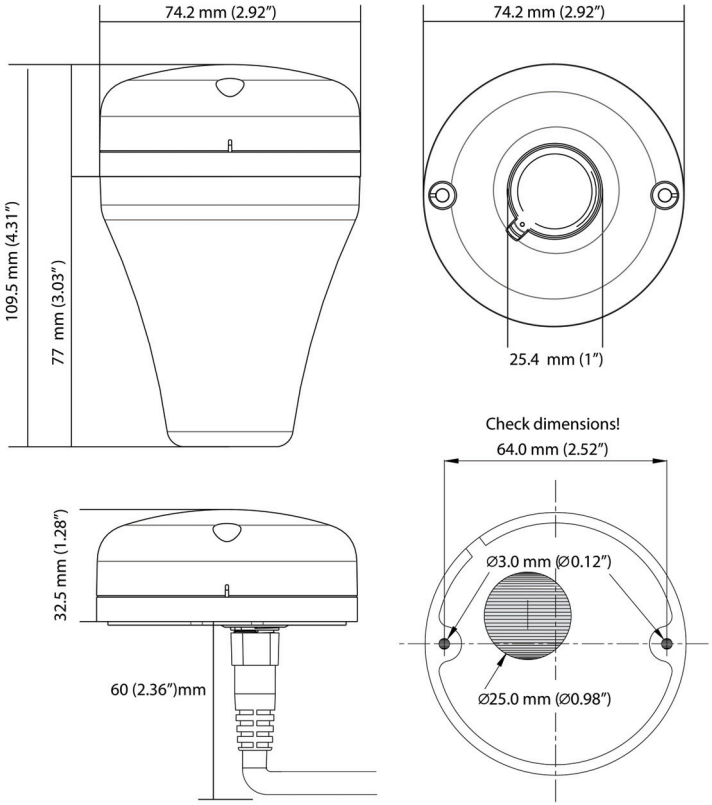
4. Screw the antenna and adapter on to the pole. The pole mount adapter is designed to fit a standard marine antenna 1" mounting pole

## 2.4 Connecting to your system




| Key | Description |
|---|---|
| A | GS15 |
| B | Micro-C to SimNet cable 4 m |
| C | Terminator or continuation of SimNet backbone |
| D | T-Connector |
| E | Display |
| F | SimNet power 12 V DC with 5 amp fuse |
| G | 12 V DC |

# 3 Drawings


74.2 mm (2.92")
109.5 mm (4.31")
77 mm (3.03")
74.2 mm (2.92")
25.4 mm (1")
Check dimensions!
64.0 mm (2.52")
32.5 mm (1.28")
Ø3.0 mm (Ø0.12")
60 (2.36")mm
Ø25.0 mm (Ø0.98")

# 4 Specifications

| Simrad GS15 specifications | |
|---|---|
| **Electrical** | |
| Receiver chip | SIRF III |
| Communications | SimNet NMEA 2000 |
| Satellite reception | 16 channel parallel, 12 satellites tracking.<br>WAAS 1 channel |
| Signal update speed | 5 Hz |
| Rx frequency | 1575.42 MHz |
| Rx code | L1 C/A |
| Position accuracy | GPS 5 m (16.5 ft) |
| | WASS 2 m (6.5 ft) |
| Postion fix time | Cold start 35s approx Warm start 1s approx |
| Tracking velocity | <1000 knots |
| Output data | System time, position, rapid update, GNSS DOP's, GNSS position data, GNSS sats in view (messages required by NMEA 2000 protocol) |
| Power supply | 8 - 35 V DC 20 mA - 40 mA @ 12 V |
| **Mechanical** | |
| Mounting method | Pole or surface mount |
| Connections | Micro-C male connector connects |
| Cable | Micro-C to SimNet cable 4 m (13 ft) |
| **Environmental** | |
| Ambient temperature | -20° C to +70° C (-4° F to 158° F) |
| Water proofing | IPX6 IEC 60529 |
| Relative humidity | 95% at 60° C (140° F) IEC 60945 |
| Vibration | Vibration IEC 60945 |

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